

WEST**Freeform Search**

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US Patents Full-Text Database
 US Pre-Grant Publication Full-Text Database
 JPO Abstracts Database
 EPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Term:

L6 same (cellobiohydrolase or CBH)

Display: Documents in Display Format: Starting with Number Generate: ☐ Hit List ☒ Hit Count ☐ Side by Side ☐ Image

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Cases

Search HistoryDATE: Monday, January 27, 2003 [Printable Copy](#) [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<u>L9</u>	L7 same endoase	0	<u>L9</u>
<u>L8</u>	L7 same pH	3	<u>L8</u>
<u>L7</u>	L6 same (cellobiohydrolase or CBH)	37	<u>L7</u>
<u>L6</u>	L5 same endoglucanase	52	<u>L6</u>
<u>L5</u>	funga! cellulase	627	<u>L5</u>
<u>L4</u>	L2 same (cellobiohydrolase or CBH)	208	<u>L4</u>
<u>L3</u>	L2 same (cellobiohydroloase or CBH)	67	<u>L3</u>
<u>L2</u>	L1 same endoglucanase	513	<u>L2</u>
<u>L1</u>	cellulase	8088	<u>L1</u>

END OF SEARCH HISTORY

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L8: Entry 1 of 3

File: USPT

Sep 25, 2001

DOCUMENT-IDENTIFIER: US 6294366 B1

TITLE: Compositions and methods for treating cellulose containing fabrics using truncated cellulase enzyme compositions

Brief Summary Text (14):

There have been previous attempts to prevent backstaining. Patent WO 92/06221 of Genecor pertains to backstaining and indicates that the cellulose biohydrolase (CBH) found in fungi cellulases is largely responsible for strength loss of the fabric and that a 5 to 1 ratio of endoglucanase to CBH is desirable. WO 96/23928, also to Genecor, relates to use of a truncated cellulase core enzyme. Both of these references emphasize the use of buffers to stabilize the cellulase solution in the wash environment. In the art it is recognized that cellulase activity is pH dependent. Most cellulases will exhibit cellulolytic activity within an acidic to neutral pH range, and the pH of an unbuffered cellulase solution could be outside the range required for cellulolytic activity. This can be undesirable and requires the addition of reagents to lower the pH of the denim following the wash cycle increasing the processing expense.

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L8: Entry 2 of 3

File: USPT

Jul 22, 1997

DOCUMENT-IDENTIFIER: US 5650322 A

TITLE: Methods for stonewashing fabrics using endoglucanases

CLAIMS:

1. A method for reducing colorant redeposition during stonewashing of colored fabrics said fabrics comprising colored threads alternating with white threads, by treatment of the fabric with a cellulase composition which method comprises contacting the fabric with an effective amount of a fungal cellulase composition substantially free of CBH type components and comprising at least about 40 weight percent of endoglucanase III derived from Trichoderma sp. which endoglucanase has a pH optimum of from about 5.0 to 7.0, an isoelectric point of about 7.2 to 8.0 and a molecular weight of from about 23 to 28 kDaltons wherein said contacting is conducted under conditions sufficient to impart a stone-washed appearance to the fabric while reducing the degree of colorant redeposition as compared to conventional stonewashing with Trichoderma sp. cellulase.

WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 37 of 37 returned.**☐ 1. Document ID: US 20020164774 A1

L7: Entry 1 of 37

File: PGPB

Nov 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020164774

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020164774 A1

TITLE: Method and compositions for treating cellulose containing fabrics using truncated cellulase enzyme compositions

PUBLICATION-DATE: November 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Fowler, Timothy Fowler	San Carlos	CA	US	
Clarkson, Kathleen A.	San Francisco	CA	US	
Ward, Michael	San Francisco	CA	US	
Collier, Katherine D.	Redwood City	CA	US	
Larenas, Edmund	Moss Beach	CA	US	

US-CL-CURRENT: [435/263](#); [435/209](#), [442/59](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw Desc	Image
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☐ 2. Document ID: US 6322595 B1

L7: Entry 2 of 37

File: USPT

Nov 27, 2001

US-PAT-NO: 6322595

DOCUMENT-IDENTIFIER: US 6322595 B1

TITLE: Detergent composition comprising two cellulase components, with and without a cellulose-binding domain

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw Desc	Image
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☐ 3. Document ID: US 6294366 B1

L7: Entry 3 of 37

File: USPT

Sep 25, 2001

US-PAT-NO: 6294366

DOCUMENT-IDENTIFIER: US 6294366 B1

TITLE: Compositions and methods for treating cellulose containing fabrics using truncated cellulase enzyme compositions

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 4. Document ID: US 6268328 B1

L7: Entry 4 of 37

File: USPT

Jul 31, 2001

US-PAT-NO: 6268328

DOCUMENT-IDENTIFIER: US 6268328 B1

TITLE: Variant EGIII-like cellulase compositions

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 5. Document ID: US 6268196 B1

L7: Entry 5 of 37

File: USPT

Jul 31, 2001

US-PAT-NO: 6268196

DOCUMENT-IDENTIFIER: US 6268196 B1

TITLE: Method and compositions for treating cellulose containing fabrics using truncated cellulase enzyme compositions

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 6. Document ID: US 6187732 B1

L7: Entry 6 of 37

File: USPT

Feb 13, 2001

US-PAT-NO: 6187732

DOCUMENT-IDENTIFIER: US 6187732 B1

TITLE: Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 7. Document ID: US 6162782 A

L7: Entry 7 of 37

File: USPT

Dec 19, 2000

US-PAT-NO: 6162782

DOCUMENT-IDENTIFIER: US 6162782 A

TITLE: Detergent compositions containing cellulase compositions deficient in CBH I type components

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc	Image
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☐ 8. Document ID: US 6107265 A

L7: Entry 8 of 37

File: USPT

Aug 22, 2000

US-PAT-NO: 6107265

DOCUMENT-IDENTIFIER: US 6107265 A

TITLE: Detergent compositions containing cellulase compositions deficient in CBH I type components

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 9. Document ID: US 6017870 A

L7: Entry 9 of 37

File: USPT

Jan 25, 2000

US-PAT-NO: 6017870

DOCUMENT-IDENTIFIER: US 6017870 A

TITLE: Purified cellulase and method of producing

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 10. Document ID: US 5997584 A

L7: Entry 10 of 37

File: USPT

Dec 7, 1999

US-PAT-NO: 5997584

DOCUMENT-IDENTIFIER: US 5997584 A

TITLE: Method of treating polyester fabrics

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 11. Document ID: US 5989899 A

L7: Entry 11 of 37

File: USPT

Nov 23, 1999

US-PAT-NO: 5989899

DOCUMENT-IDENTIFIER: US 5989899 A

TITLE: Oversized cellulase compositions for use in detergent compositions and in the treatment of textiles

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 12. Document ID: US 5874293 A

L7: Entry 12 of 37

File: USPT

Feb 23, 1999

US-PAT-NO: 5874293

DOCUMENT-IDENTIFIER: US 5874293 A

TITLE: Cellulase composition for treating cellulose-containing textile material

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 13. Document ID: US 5858767 A

L7: Entry 13 of 37

File: USPT

Jan 12, 1999

US-PAT-NO: 5858767

DOCUMENT-IDENTIFIER: US 5858767 A

TITLE: Cellulase composition for biofinishing cellulose-containing textile materials

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KM/C	Draw Desc	Image
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☐ 14. Document ID: US 5776757 A

L7: Entry 14 of 37

File: USPT

Jul 7, 1998

US-PAT-NO: 5776757

DOCUMENT-IDENTIFIER: US 5776757 A

TITLE: Fungal cellulase composition containing alkaline CMC-endoglucanase and essentially no cellobiohydrolase and method of making thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KM/C	Draw Desc	Image
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☐ 15. Document ID: US 5770104 A

L7: Entry 15 of 37

File: USPT

Jun 23, 1998

US-PAT-NO: 5770104

DOCUMENT-IDENTIFIER: US 5770104 A

TITLE: Detergent compositions containing substantially pure EG III cellulase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KM/C	Draw Desc	Image
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☐ 16. Document ID: US 5753484 A

L7: Entry 16 of 37

File: USPT

May 19, 1998

US-PAT-NO: 5753484

DOCUMENT-IDENTIFIER: US 5753484 A

TITLE: Trichoderma longibrachiatum EGIII cellulase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KM/C	Draw Desc	Image
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☐ 17. Document ID: US 5691178 A

L7: Entry 17 of 37

File: USPT

Nov 25, 1997

US-PAT-NO: 5691178

DOCUMENT-IDENTIFIER: US 5691178 A

TITLE: Fungal cellulase composition containing alkaline CMC-endoglucanase and essentially no cellobiohydrolase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 18. Document ID: US 5688290 A

L7: Entry 18 of 37

File: USPT

Nov 18, 1997

US-PAT-NO: 5688290

DOCUMENT-IDENTIFIER: US 5688290 A

TITLE: Degradation resistant detergent compositions based on cellulase enzymes

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 19. Document ID: US 5668009 A

L7: Entry 19 of 37

File: USPT

Sep 16, 1997

US-PAT-NO: 5668009

DOCUMENT-IDENTIFIER: US 5668009 A

TITLE: Methods for treating cotton-containing fabrics with CBH I enriched cellulase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 20. Document ID: US 5654193 A

L7: Entry 20 of 37

File: USPT

Aug 5, 1997

US-PAT-NO: 5654193

DOCUMENT-IDENTIFIER: US 5654193 A

TITLE: Methods for treating cotton containing fabrics with cellulase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 21. Document ID: US 5650322 A

L7: Entry 21 of 37

File: USPT

Jul 22, 1997

US-PAT-NO: 5650322

DOCUMENT-IDENTIFIER: US 5650322 A

TITLE: Methods for stonewashing fabrics using endoglucanases

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KIMC	Draw Desc	Image
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☐ 22. Document ID: US 5610034 A

L7: Entry 22 of 37

File: USPT

Mar 11, 1997

US-PAT-NO: 5610034

DOCUMENT-IDENTIFIER: US 5610034 A

TITLE: Immunoglobulin production by trichoderma

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 23. Document ID: US 5525507 A

L7: Entry 23 of 37

File: USPT

Jun 11, 1996

US-PAT-NO: 5525507

DOCUMENT-IDENTIFIER: US 5525507 A

TITLE: Methods for treating cotton-containing fabric with cellulase composition containing endoglucanase component and which is free of all CBH I component

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 24. Document ID: US 5475101 A

L7: Entry 24 of 37

File: USPT

Dec 12, 1995

US-PAT-NO: 5475101

DOCUMENT-IDENTIFIER: US 5475101 A

TITLE: DNA sequence encoding endoglucanase III cellulase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 25. Document ID: US 5472864 A

L7: Entry 25 of 37

File: USPT

Dec 5, 1995

US-PAT-NO: 5472864

DOCUMENT-IDENTIFIER: US 5472864 A

TITLE: Method of preparing solution enriched in EG III using low molecular weight alcohol, organic salt and inorganic salt

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 26. Document ID: US 5434072 A

L7: Entry 26 of 37

File: USPT

Jul 18, 1995

US-PAT-NO: 5434072

DOCUMENT-IDENTIFIER: US 5434072 A

TITLE: Method for preparing an aqueous solution enriched in both EG-III & xylanase using a low molecular weight alcohol and an organic salt

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 27. Document ID: US 5419778 A

L7: Entry 27 of 37

File: USPT

May 30, 1995

US-PAT-NO: 5419778

DOCUMENT-IDENTIFIER: US 5419778 A

TITLE: Detergent compositions containing substantially pure EG III cellulase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 28. Document ID: US 5352243 A

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File: USPT

Oct 4, 1994

US-PAT-NO: 5352243

DOCUMENT-IDENTIFIER: US 5352243 A

TITLE: Methods of enhancing printing quality of pigment compositions onto cotton fabrics

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 29. Document ID: US 5328841 A

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File: USPT

Jul 12, 1994

US-PAT-NO: 5328841

DOCUMENT-IDENTIFIER: US 5328841 A

TITLE: Methods for isolating EG III cellulase component and EG III cellulase in polyethylene glycol using inorganic salt and polyethylene glycol

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 30. Document ID: US 5320960 A

L7: Entry 30 of 37

File: USPT

Jun 14, 1994

US-PAT-NO: 5320960

DOCUMENT-IDENTIFIER: US 5320960 A

TITLE: Method of preparing solution enriched in xylanase using low molecular weight alcohol, organic salt and inorganic salt

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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☐ 31. Document ID: US 5290474 A

L7: Entry 31 of 37

File: USPT

Mar 1, 1994

US-PAT-NO: 5290474

DOCUMENT-IDENTIFIER: US 5290474 A

TITLE: Detergent composition for treating cotton-containing fabrics containing a surfactant and a cellulase composition containing endolucanase III from trichoderma ssp

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 32. Document ID: US 5246853 A

L7: Entry 32 of 37

File: USPT

Sep 21, 1993

US-PAT-NO: 5246853

DOCUMENT-IDENTIFIER: US 5246853 A

TITLE: Method for treating cotton-containing fabric with a cellulase composition containing endoglucanase components and which composition is free of exo-cellobiohydrolase I

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 33. Document ID: WO 9525840 A1 FI 9505553 A EP 699248 A1 US 5525507 A JP 08510520 W EP 699248 B1 DE 69520991 E

L7: Entry 33 of 37

File: DWPI

Sep 28, 1995

DERWENT-ACC-NO: 1995-344645

DERWENT-WEEK: 200211

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TITLE: Treating non-cotton contg. fabric with cellulose - to enhanced feel, appearance and softness as compared to the fabrics prior to treatment.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Clip Img	Image
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☐ 34. Document ID: WO 9516782 A1 FI 9602444 A EP 733115 A1 JP 09506514 W

L7: Entry 34 of 37

File: DWPI

Jun 22, 1995

DERWENT-ACC-NO: 1995-231574

DERWENT-WEEK: 200159

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TITLE: Pure, truncated fungal cellulase protein from Trichoderma - useful to reduce or eliminate dye, colourant or pigment back-staining or redeposition in stone-washing or bio-polishing

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 35. Document ID: WO 9407983 A1 AU 9349247 A FI 9501497 A EP 663004 A1 JP 08502101 W TW 284810 A US 5650322 A BR 9307136 A MX 191421 B

L7: Entry 35 of 37

File: DWPI

Apr 14, 1994

DERWENT-ACC-NO: 1994-135554
DERWENT-WEEK: 200211
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TITLE: Method for stonewashing coloured fabrics to show reduced colour redeposition
- by treating the fabric with a fungal cellulase compsn free of CBH type components
and contg endoglucanases.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Clip Img	Image
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☐ 36. Document ID: WO 9217572 A1 US 5246853 A FI 9304083 A FI 9304084 A EP
577722 A1 EP 580719 A1 JP 06506359 W JP 06506829 W EP 577722 A4 EP 580719 A4

L7: Entry 36 of 37

File: DWPI

Oct 15, 1992

DERWENT-ACC-NO: 1992-366245
DERWENT-WEEK: 200211
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TITLE: Finishing cotton-contg. fabrics while reducing strength loss - using a fungal
cellulase-free compsn. of exo-cellobiohydrolase I type components

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 37. Document ID: ES 2170748 T3 WO 9206221 A FI 9301491 A EP 553280 A1 FI
9304084 A EP 577722 A1 JP 06502226 W JP 06506829 W EP 553280 A4 US 5654193 A CA
2093424 C EP 553280 B1 DE 69132894 E

L7: Entry 37 of 37

File: DWPI

Aug 16, 2002

DERWENT-ACC-NO: 1992-150903
DERWENT-WEEK: 200265
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TITLE: Improved fungal cellulase treatment of cotton-contg. fabrics - using
cellulase compsn. free of exo-cellobio-hydrolase type components

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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L6 same (cellobiohydrolase or CBH)	37

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SEA FUNGAL CELLULASE

62 FILE AGRICOLA
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32 FILE BIOBUSINESS
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152 FILE BIOSIS
89 FILE BIOTECHABS
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 1623 FILE ESBIODBASE
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 806 FILE FROSTI
 2080 FILE FSTA
 1204 FILE GENBANK
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L2 QUE CELLULASE

FILE 'CAPLUS, BIOSIS, SCISEARCH, BIOTECHDS' ENTERED AT 09:06:45 ON 27 JAN 2003

L3 623 S L1 (S) FUNG?
 L4 84 S L3 (P) ENDOGLUCANASE
 L5 43 S L4 AND (CELLOBIOHYDROLASE OR CBH)
 L6 4 S L5 (S) PH
 L7 4 DUP REM L6 (0 DUPLICATES REMOVED)
 L8 36 DUP REM L5 (7 DUPLICATES REMOVED)
 L9 5 S L5 AND FREE
 L10 5 DUP REM L9 (0 DUPLICATES REMOVED)

=> s l5 and free
L9 5 L5 AND FREE

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10 5 DUP REM L9 (0 DUPLICATES REMOVED)

=> d l10 ibib ab 1-5

L10 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:527652 CAPLUS
DOCUMENT NUMBER: 127:163081
TITLE: Stonewashing using endoglucanases for reduced
back-staining on fabrics
INVENTOR(S): Clarkson, Kathleen A.; Larenas, Edmund; Weiss,
Geoffrey; Bower, Benjamin S.
PATENT ASSIGNEE(S): Genencor International, Inc., USA
SOURCE: U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 677,385,
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 18
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5650322	A	19970722	US 1992-954113	19920930
US 5246853	A	19930921	US 1991-678865	19910329
CA 2107206	AA	19920930	CA 1992-2107206	19920330
CA 2107208	AA	19920930	CA 1992-2107208	19920330
WO 9407983	A1	19940414	WO 1993-US8735	19930915
W: AU, BR, CA, FI, JP, KP, NZ, PL, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9349247	A1	19940426	AU 1993-49247	19930915
EP 663004	A1	19950719	EP 1993-921613	19930915
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, SE				
JP 08502101	T2	19960305	JP 1993-509093	19930915
BR 9307136	A	19990330	BR 1993-7136	19930915
US 5654193	A	19970805	US 1993-149700	19931109
US 6107265	A	20000822	US 1993-152099	19931115
US 6162782	A	20001219	US 1995-463518	19950605
PRIORITY APPLN. INFO.:			US 1990-593919	B2 19901005
			US 1991-677385	B2 19910329
			US 1991-678865	B2 19910329
			US 1991-770049	B2 19911004
			US 1991-713738	B1 19910611
			US 1992-954113	A1 19920930
			WO 1993-US8735	W 19930915
			US 1993-152099	A1 19931115

AB Contacting fabrics with a **fungus cellulase** compn.
which is substantially **free** of **cellobiohydrolase** (**CBH**) type components and **gtoreq.40% endoglucanase** III,
derived from *Trichoderma* sp., having optimum pH 5.0-7.0, an isoelec. point
7.2-8.0, and a mol. wt. 23-28 kDaltons shows lowered redeposition of
colorant.

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:411040 CAPLUS
DOCUMENT NUMBER: 125:117330
TITLE: Treatment of cotton-containing fabric with cellulase
composition containing an endoglucanase and
free of cellobiohydrolase I
INVENTOR(S): Clarkson, Kathleen A.; Larenas, Edmund; Weiss,

Geoffrey L.
PATENT ASSIGNEE(S): Genencor International, Inc., USA
SOURCE: U.S., 29 pp., Cont.-in-part of U.S. Ser. No. 65,227,
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 18
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5525507	A	19960611	US 1994-210209	19940318
US 5246853	A	19930921	US 1991-678865	19910329
CA 2107208	AA	19920930	CA 1992-2107208	19920330
US 6107265	A	20000822	US 1993-152099	19931115
WO 9525840	A1	19950928	WO 1995-US3047	19950314
W: CA, FI, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 699248	A1	19960306	EP 1995-913647	19950314
EP 699248	B1	20010523		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08510520	T2	19961105	JP 1995-524677	19950314
US 6162782	A	20001219	US 1995-463518	19950605
FI 9505553	A	19951117	FI 1995-5553	19951117

PRIORITY APPLN. INFO.:
US 1990-593919 B2 19901005
US 1991-678865 A3 19910329
US 1993-65227 B2 19930524
US 1991-713738 B1 19910611
US 1993-152099 A1 19931115
US 1994-210209 A 19940318
WO 1995-US3047 W 19950314

AB The treatment of cotton-contg. fabrics and non-cotton contg. cellulosic fabrics with cellulase soln. was improved by applying a **fungus cellulase** compn. with .gtoreq.10% of **endoglucanase** which is substantially **free** of all **CBH I** type cellulases to minimize the loss of fiber strength. The **endoglucanase** is manufd. using a *Trichoderma longibrachiatum* that has one or more of the genes encoding **cellobiohydrolases** deleted to minimize any contaminating activity. **Endoglucanase** preps. from strains with one or more of these genes (cbh1, cbh2, egl1) deleted were tested for their effects on cotton strength loss in a launderometer strength loss assay. **Cellobiohydrolase I** played the most significant role in strength loss with isoenzyme II also playing a role.

→ pH 4.5 to 8.0.

L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:787312 CAPLUS
DOCUMENT NUMBER: 123:168245
TITLE: Fungal cellulases as digestibility-improving additives for cereal-based feed
INVENTOR(S): Bedford, Michael Richard; Morgan, Andrew John; Fowler, Timothy; Clarkson, Kathleen A.; Ward, Michael; Collier, Katherine D.; Larenas, Edmund
PATENT ASSIGNEE(S): Finnfeeds International Ltd., UK; Genencor International Inc.
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9516360	A1	19950622	WO 1994-EP4212	19941219
W: AU, CA, CN, CZ, FI, HU, NO, NZ, PL, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5861271	A	19990119	US 1993-169948	19931217
CA 2156066	AA	19950622	CA 1994-2156066	19941219
CA 2178636	AA	19950622	CA 1994-2178636	19941219
AU 9513836	A1	19950703	AU 1995-13836	19941219
AU 685210	B2	19980115		
EP 684770	A1	19951206	EP 1995-905079	19941219
EP 684770	B1	20010725		
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE				
CN 1118131	A	19960306	CN 1994-191216	19941219
CN 1093379	B	20021030		
AT 203373	E	20010815	AT 1995-905079	19941219
ES 2160694	T3	20011116	ES 1995-905079	19941219
US 5874276	A	19990223	US 1995-448873	19950524
FI 9503867	A	19951003	FI 1995-3867	19950816
NO 9503218	A	19951016	NO 1995-3218	19950816

PRIORITY APPLN. INFO.:

US 1993-169948	A	19931217
WO 1994-EP4212	W	19941219

AB A feed additive of endoglucanases (cellulases) and 0-20% by wt., based upon the content of cellulase in the feed, of a **cellobiohydrolase** is described to improve the feed conversion ratio and digestibility of cereal-based feeds. The endoglucanase may be one or more of EGI, EGII, EGIII or a functionally active deriv. that may be obtained from a genetically modified strain of the fungus *Trichoderma*. Similar additives using EGI or EGII analogs lacking the cellulose-binding domain either **free** or bound to a cereal-based carrier and cellulase are also described. Such enzyme-based feed additives can be incorporated into a cereal-based feed which includes one or more of barley, wheat, triticale, rye and maize. Feeding expts. on poultry showed that supplementation of the feed with combinations of isoenzymes and analogs improved feed conversion ratios or body wt. gain or lowered viscosity in the gastrointestinal tract.

L10 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:248291 CAPLUS
DOCUMENT NUMBER: 122:12558
TITLE: Methods for stonewashing fabrics using endoglucanases
INVENTOR(S): Clarkson, Kathleen A.; Larenas, Edmund; Weiss, Geoffrey; Bower, Benjamin S.
PATENT ASSIGNEE(S): Genecor International, Inc., USA
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 18
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9407983	A1	19940414	WO 1993-US8735	19930915
W: AU, BR, CA, FI, JP, KP, NZ, PL, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5650322	A	19970722	US 1992-954113	19920930
AU 9349247	A1	19940426	AU 1993-49247	19930915
EP 663004	A1	19950719	EP 1993-921613	19930915
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, SE				
JP 08502101	T2	19960305	JP 1993-509093	19930915
BR 9307136	A	19990330	BR 1993-7136	19930915
FI 9501497	A	19950510	FI 1995-1497	19950329

PRIORITY APPLN. INFO.:

US 1992-954113	A1	19920930
US 1990-593919	B2	19901005
US 1991-677385	B2	19910329

PH 4-0-8-0

US 1991-678865 B2 19910329
US 1991-770049 B2 19911004
US 1992-974113 A 19920930
WO 1993-US8735 W 19930915

AB Undesirable redeposition of dye onto fabrics (esp. denim) during stonewashing is minimized by using a **fungal cellulase** compn. which comprises **endoglucanase**-type components substantially **free** of **CBH**-type components.

PH 4-0-8.0.

L10 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:541146 CAPLUS

DOCUMENT NUMBER: 119:141146

TITLE: Methods for treating cotton-containing fabrics with cellulase **free** of exo-**cellobiohydrolase**, and the treated fabrics

INVENTOR(S): Clarkson, Kathleen A.; Larenas, Edward; Weiss, Geoffrey L.

PATENT ASSIGNEE(S): Genencor International, Inc., USA

SOURCE: PCT Int. Appl., 106 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9217572	A1	19921015	WO 1992-US2629	19920330
W: CA, FI, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
US 5246853	A	19930921	US 1991-678865	19910329
CA 2107208	AA	19920930	CA 1992-2107208	19920330
EP 580719	A1	19940202	EP 1992-909820	19920330
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06506359	T2	19940721	JP 1992-509375	19920330

PRIORITY APPLN. INFO.:

US 1991-678865 A2 19910329
US 1991-770049 A2 19911004
US 1990-593919 B2 19901005
WO 1992-US2629 W 19920330

AB A method of treating cotton-based textiles to give a stone-washed appearance by treatment with **fungal cellulases** is described. The cellulase prepn. is **free** of exo-**cellobiohydrolase** I and II (**CBH** I, II) and so does not cause a loss of strength of the textile. The cellulase prepn. is freed of **CBH** I and **CBH** II activity by either deleting the corresponding genes from the producer organism (*Trichoderma reesei*) or by chromatog. purifn. of the individual components of the com. cellulase prepn. Deletion of the genes for **CBH** I and II by transformation with a deletion vector using the *T. reesei* pyr4 gene as selectable marker in pyr4- host was demonstrated. The deletion of the genes for **cellobiohydrolases** I and II and **endoglucanases** I and II in *T. reesei* was also demonstrated. The three **endoglucanase** activities of the prepn. were identified and characterized.

PH 5-8.

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